

1	Title	Satellite Power System	
2	Lecturer, Units	Mengu Cho, Mitsuru Imaizumi, Hitoshi Naito, Kazunori Shimazaki, Hiroaki Kusawake, Yukishige Nozaki	2
3	Purpose	Satellite power system is an essential subsystem that guarantees the success of satellite mission. Without power, a satellite is useless. This course will give introduction to satellite power system, from its overview to description of each element and future topics.	
4	Lecture schedule	<ol style="list-style-type: none"> <li>1. Power system options</li> <li>2. Photovoltaic-Batter System</li> <li>3. Power System Design</li> <li>4. Solar cell principle</li> <li>5. Space Solar cell state-of-art</li> <li>6. Environmental Effect</li> <li>7. Solar Array System</li> <li>8. Battery</li> <li>9. Space Battery state-of-art</li> <li>10. Power Control Algorithm</li> <li>11. Power Control Hardware</li> <li>12. Reliability</li> <li>13. High Voltage Power System</li> <li>14. Micro/Nano Satellite Power System</li> <li>15. Space Solar Power System</li> </ol>	
5	Evaluation	Reports and mini-test.	
6	Note	This lecture is provided in English. It is desirable for students to take space system related subjects, such as Space Systems Engineering and Introduction to Satellite Engineering.	
7	Textbook Reference	Reference book: Spacecraft Power Systems by Mukun R. Patel, CRC Press, 2005	